

### **REMARKS**

The foregoing amendment amends Claims 9, 10, 12 and 14 and cancels Claim 11. Claims 1-10 and 12-27 are pending with Claims 1-8, 26 and 27 being withdrawn.

#### **Claims 12 and 15 are Definite**

The Examiner rejected Claims 12 and 15 under 35 U.S.C. §112, second paragraph, alleging that the claims are indefinite. The foregoing amendment to Claim 12 clarifies that the insulator covers the whole device so that Claim 12 and Claim 15, which depends from Claim 12, are definite.

#### **Objection to Claim 9**

The Examiner objected to Claim 9 for an informality. The foregoing amendment to Claim 9 addresses the informality by inserting the word “an” prior to “electro-optic crystal.”

#### **Kikuchi Does Not Describe the Claimed Invention**

The Examiner rejected independent Claim 9 under 35 U.S.C. §102(b) as being anticipated by U.S. Pat. No. 5,526,169 to Kikuchi et al. (“Kikuchi”). The foregoing amendment to Claim 9 clarifies that the electrodes are formed on one pair of side faces of the ridge portion and on the whole top surface of the base portion that is adjacent to the side faces. As shown in Fig. 10C the electrodes 25a and 25b are formed on the side faces and the adjoining top surface. This configuration is also illustrated by Figs. 10D, 13, 15, 16 and 22A-22C. One advantage of this configuration is that it makes the device rigid and increases the strength of the device, as well as suppresses noises due to undesired oscillations.

In rejecting Claim 9, the Examiner alleged that electrodes 16 and 18 or 17 and 15 of Figs. 5-7 of Kikuchi describe the pair of electrodes recited by Claim 9. Fig. 7 of Kikuchi illustrates that the electrodes are only formed on the side faces, which is confirmed by the accompanying text which states that the electrodes 15 and 16 “are deposited respectively on the entire faces ‘c’ 14c, 14c’ of the electro-optical crystal 14 by evaporation. Col. 7, line 66 – Column 8, line 1. Fig. 3 of Kikuchi illustrates another embodiment where an outer

electrode 3 is formed on an outer face of the crystal 1 and a groove electrode 5 is formed in the groove 8. The outer electrode is formed only on the outer face of the crystal. The outer electrode is not formed on a portion of the top surface adjacent to the side face, as required by Claim 9. In light of the foregoing, it is submitted that Kikuchi does not describe the invention of Claim 9.

Claims 10 and 12-25 depend from Claim 9 and are patentable over the cited references for at least the same reasons a Claim 9. The foregoing amendment amends Claim 10 to confirm to the amendment to Claim 9 and amends Claim 14 to clarify the configuration of the insulator. Fig. 22A illustrates one embodiment that corresponds to Claim 14. In rejecting Claims 21-23, the Examiner cited U.S. Pat. No. 4,866,406 to Minakata et al. ("Minakata"). The cited section of Minakata describes an  $\text{Al}_2\text{O}_3$  buffer layer, which is used to prevent the attenuation of light and the Al electrodes. The  $\text{Al}_2\text{O}_3$  buffer layer is not equivalent to the claimed adhesive agent. In light of the foregoing, it is submitted that Claims 10 and 12-25 are also patentable over the cited references.

### CONCLUSION

In light of the foregoing, it is respectfully submitted that the pending claims are allowable and a notice of allowance is respectfully requested. If there are any issues that can be resolved via a telephone conference, the Examiner is invited to contact Brenda Holmes at 404 685 6799.

Respectfully submitted,



By: Brenda O. Holmes  
Reg. No. 40,339

KILPATRICK STOCKTON LLP  
1100 Peachtree Street, Suite 2800  
Atlanta, Georgia 30309-4530  
Telephone: (404) 815-6500  
Facsimile: (404) 815-6555  
Our Docket: 44471/311746